

Mineral Industry Surveys

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SILICON IN JULY 2006

Preliminary data for July 2006 indicate that domestic production and net shipments of silicon ferroalloys, on a gross-weight basis, decreased slightly and by 5%, respectively, compared with those in June 2006, according to the U.S. Geological Survey. Stocks increased by 3% compared with those of the prior month. Stocks included adjustments in inventory and in-plant consumption of ferrosilicon to produce magnesium ferrosilicon and other miscellaneous alloys. Production-related statistics for silicon metal were concealed to avoid disclosing company proprietary data.

Based on a gross-weight comparison of June 2006 export data (table 2) with those of May 2006, ferrosilicon exports increased

slightly, owing to an increase in the ferrosilicon, more than 55%, trade category. Silicon metal exports increased by 48%, owing primarily to an increase in the silicon metal, other, trade category.

Based on a gross-weight comparison of June 2006 import data (table 3) with those of the prior month, ferrosilicon imports decreased by 14%, owing primarily to decreases in the following trade categories: 1) ferrosilicon, 55% to 80% silicon, other; and 2) ferrosilicon, other. Silicon metal imports increased by 23% during the same period, primarily because of an increase in the 99.00% to 99.99% silicon trade category.

Prices, cents per pound, silicon content

	<u>50% Ferrosilicon¹</u>	<u>75% Ferrosilicon²</u>	<u>Silicon Metal²</u>
July 6	65.00-70.00	60.00-63.00	75.00-78.00
July 13	64.00-70.00	59.00-63.00	75.00-78.00
July 20	64.00-70.00	59.00-63.00	75.00-78.00
July 27	64.00-68.00	59.00-63.00	75.00-78.00

¹Source: Ryan's Notes, North American transaction price.

²Source: Platts Metals Week, dealer import price.

TABLE 1
U.S. PRODUCTION, SHIPMENTS, AND PRODUCER STOCKS OF SILICON ALLOYS AND METAL IN 2006^{1, 2, 3}

(Metric tons)

Material	Gross production ⁴		Net shipments		Stocks, July 31
	July	Year to date	July	Year to date	
Ferrosilicon, all grades ^{5, 6}	19,600	143,000	15,700	117,000	21,900
Silicon metal, excludes semiconductor grades	W	W	W	W	W

W Withheld to avoid disclosing company proprietary data.

¹Data are rounded to no more than three significant digits.

²Includes U.S. Geological Survey estimates.

³Data for silvery pig iron (less than 25% silicon) withheld to avoid disclosing company proprietary data.

⁴Includes in-plant consumption, as in production of magnesium ferrosilicon and other miscellaneous alloys.

⁵Ferrosilicon categories were aggregated to avoid disclosing company proprietary data.

⁶Includes miscellaneous silicon alloys.

TABLE 2
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN JUNE 2006^{1, 2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon:						
More than 55% silicon:						
Canada	438	263	\$458,000	2,120	1,270	\$2,220,000
Colombia	10	7	20,900	39	28	61,900
Malaysia	--	--	--	11	8	15,600
Mexico	124	74	166,000	697	420	913,000
Total	572	344	645,000	2,870	1,730	3,210,000
Other ferrosilicon:						
Brazil	--	--	--	80	40	93,600
Canada	182	91	195,000	1,250	623	1,270,000
Colombia	11	5	15,600	59	27	83,900
Finland	8	4	8,510	8	4	8,510
Indonesia	--	--	--	21	10	25,100
Korea, Republic of	--	--	--	2	1	11,400
Mexico	93	45	110,000	408	202	512,000
Spain	--	--	--	8	4	9,360
Switzerland	--	--	--	34	17	26,700
Total	294	145	329,000	1,860	928	2,040,000
Total ferrosilicon	866	489	974,000	4,730	2,660	5,250,000

See footnotes at end of table.

TABLE 2--Continued
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN JUNE 2006^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Metal:						
More than 99.99% silicon:						
China	180	XX	\$18,200,000	886	XX	\$73,900,000
Finland	24	XX	823,000	66	XX	2,500,000
Germany	263	XX	14,000,000	1,070	XX	58,800,000
Ireland	26	XX	1,020,000	60	XX	2,420,000
Italy	8	XX	854,000	61	XX	5,450,000
Japan	485	XX	39,800,000	3,480	XX	273,000,000
Korea, Republic of	150	XX	12,100,000	688	XX	58,300,000
Norway	204	XX	9,820,000	1,100	XX	53,000,000
Taiwan	45	XX	3,290,000	266	XX	17,600,000
United Kingdom	7	XX	906,000	66	XX	7,770,000
Other (42 countries)	26	XX	2,800,000	191	XX	17,400,000
Total	1,420	1,420 ^e	104,000,000	7,930	7,930 ^e	570,000,000
99.00% - 99.99% silicon:						
Belarus	--	--	--	34	34	37,700
Brazil	71	71	198,000	494	490	1,260,000
China	9	9	24,200	337	334	918,000
Germany	10	10	10,000	309	306	870,000
India	--	--	--	52	51	150,000
Italy	42	41	123,000	70	70	206,000
Japan	--	--	--	25	24	28,300
Mexico	--	--	--	21	21	33,000
Sweden	--	--	--	17	17	24,300
United Kingdom	--	--	--	23	23	32,200
Other (6 countries)	5	5	6,520	45	45	84,500
Total	136	135	361,000	1,430	1,420	3,640,000
Other silicon:						
Brazil	--	--	--	38	37	50,200
Canada	16	15	18,100	222	215	264,000
China	514	489	3,900,000	1,010	970	5,530,000
Germany	--	--	--	28	26	261,000
Hong Kong	(3)	(3)	3,030	55	52	631,000
Japan	364	347	1,790,000	809	774	4,160,000
Korea, Republic of	132	128	174,000	1,610	1,560	2,240,000
Mexico	8	8	19,200	65	63	204,000
Netherlands	--	--	--	105	100	1,080,000
Panama	--	--	--	20	20	24,100
Other (10 countries)	6	5	14,300	68	65	219,000
Total	1,040	993	5,910,000	4,030	3,880	14,700,000
Total silicon metal	2,590	2,550	110,000,000	13,400	13,200	588,000,000

^eEstimated. XX Not applicable. -- Zero.

¹Presentation of monthly data is based on the year-to-date quantities (gross weight) of the top 10 countries.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN JUNE 2006^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon:						
55% - 80% silicon, over 3% Ca:						
Brazil	--	--	--	20	13	\$24,500
China	--	--	--	35	23	58,800
France	71	43	\$110,000	380	235	605,000
Total	71	43	110,000	435	270	688,000
55% - 80% silicon, Other:						
Brazil	283	211	266,000	2,920	2,180	2,310,000
Canada	973	709	780,000	5,270	3,970	4,820,000
China	15,700	11,900	10,700,000	64,000	48,500	42,200,000
France	232	157	379,000	2,420	1,650	4,450,000
Germany	53	41	262,000	270	200	1,230,000
Norway	999	737	1,180,000	4,350	3,220	5,410,000
Russia	3,940	3,050	2,960,000	29,900	22,100	19,000,000
South Africa	--	--	--	2,520	1,880	1,640,000
Ukraine	--	--	--	3,050	2,300	1,740,000
Venezuela	6,250	4,690	4,530,000	24,400	18,300	16,100,000
Other (4 countries)	--	--	--	120	78	293,000
Total	28,400	21,500	21,100,000	139,000	104,000	99,200,000
More than 90% silicon, China	--	--	--	21	19	6,300
Magnesium ferrosilicon:						
Argentina	371	167	346,000	1,220	540	1,140,000
Brazil	9	4	7,480	486	217	461,000
Canada	597	280	623,000	3,680	1,710	3,730,000
China	40	18	61,200	343	157	340,000
France	92	43	83,700	987	472	889,000
India	--	--	--	69	31	63,600
Japan	--	--	--	63	28	119,000
Netherlands	82	38	59,400	245	113	178,000
Norway	682	314	626,000	5,480	2,510	4,900,000
Russia	--	--	--	2,100	943	854,000
Other (4 countries)	34	15	71,900	110	48	170,000
Total	1,910	879	1,880,000	14,800	6,780	12,800,000
Other ferrosilicon:						
Brazil	--	--	--	43	6	56,300
Canada	780	231	665,000	4,590	1,250	3,900,000
China	300	225	183,000	1,600	1,200	1,000,000
France	33	15	29,700	91	56	142,000
India	--	--	--	71	31	59,700
United Kingdom	4	2	6,560	5	2	8,840
Total	1,120	472	884,000	6,400	2,550	5,170,000
Total ferrosilicon	31,500	22,900	24,000,000	161,000	114,000	118,000,000

See footnotes at end of table.

TABLE 3--Continued
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN JUNE 2006^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Metal:						
More than 99.99% silicon:						
Canada	19	XX	\$30,700	19	XX	\$30,700
China	17	XX	485,000	35	XX	1,770,000
France	4	XX	278,000	25	XX	2,160,000
Germany	73	XX	5,370,000	415	XX	32,200,000
Italy	19	XX	2,750,000	139	XX	13,200,000
Japan	33	XX	2,550,000	165	XX	13,800,000
Korea, Republic of	4	XX	791,000	22	XX	3,820,000
Spain	1	XX	12,200	6	XX	42,800
Sweden	--	XX	--	8	XX	54,300
Taiwan	(3)	XX	2,670	7	XX	762,000
Other (12 countries)	(3)	XX	75,100	22	XX	516,000
Total	170	170 ^e	12,300,000	863	863 ^e	68,400,000
99.00% - 99.99% silicon:						
Australia	1,020	1,010	1,520,000	6,880	6,830	10,300,000
Brazil	5,100	5,060	7,640,000	21,700	21,500	32,400,000
Canada	1,770	1,760	2,870,000	8,290	8,230	13,500,000
China	--	--	--	76	74	109,000
Germany	--	--	--	(3)	(3)	2,250
Norway	603	599	1,170,000	3,420	3,380	6,840,000
Philippines	107	107	132,000	590	550	64,900
South Africa	4,210	4,180	6,070,000	19,000	18,800	28,400,000
Sweden	8	8	52,500	25	25	159,000
United Kingdom	50	5 ⁴	90,300	225	29	436,000
Total	12,900	12,700	19,500,000	60,100	59,400	92,300,000
Other silicon:						
Australia	48	48	76,200	144	142	226,000
Belgium	--	--	--	14	13	41,500
Brazil	445	440	583,000	4,070	4,020	5,720,000
Canada	697	603	814,000	4,080	3,850	5,560,000
Japan	22	1	23,900	56	9	77,000
Norway	--	--	--	1,000	985	1,550,000
Philippines	--	--	--	18	18	20,200
Sweden	60	17	80,700	125	18	152,000
Ukraine	60	59	75,000	1,870	1,840	2,240,000
United Kingdom	20	20	31,300	295	286	380,000
Other (4 countries)	21	19	28,400	21	20	39,900
Total	1,370	1,210	1,710,000	11,700	11,200	16,000,000
Total silicon metal	14,400	14,100	33,600,000	72,700	71,500	177,000,000

^eEstimated. XX Not applicable. -- Zero.

¹Presentation of monthly data is based on the year-to-date quantities (gross weight) of the top 10 countries.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Less than ½ unit.

⁴All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.